PERMIT TO OPERATE

Ovens

APPLICANT:	Ducommun Aerostructures, Inc.
FACILITY ID:	140811
EQUIPMENT LOCATION	801 Royal Oaks Drive, Monrovia, CA 91016
MAILING ADDRESS :	801 Royal Oaks Drive, Monrovia, CA 91016

EQUIPMENT DESCRIPTION

A/N 493017- Title V Permit Revision

Deminimus significant permit revision

A/N 485212 - PO no PC

OVEN #1740, INDOCO, 21'-0" L X 6'-9" W X 6'-3" H, WITH ONE 1,200,000 BTU/HOUR NATURAL GAS FIRED BURNER, ONE 10 H.P. CIRCULATING FAN AND ONE 1/3 H.P. EXHAUST FAN.

A/N 485213 - Cancel

OVEN #1726, BARON, 14'-0" L X 7'-8" W X 7'-0" H, WITH ONE 1,000,000 BTU/HOUR NATURAL GAS FIRED BURNER, ONE 5 H.P. CIRCULATING FAN AND ONE 1/2 H.P. EXHAUST FAN.

Cancel - Exempt under Rule 219(b)(2).

A/N 485212 - Conditions :

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE BURNER IN THIS EQUIPMENT SHALL NOT USE MORE THAN 7,692 CUBIC FEET OF NATURAL GAS IN ANY ONE DAY.

4. A NON-RESETTABLE TOTALIZING FUEL METER SHALL BE INSTALLED AND MAINTAINED TO VERIFY COMPLIANCE WITH THE DAILY NATURAL GAS USAGE LIMIT.

5. THE OPERATOR SHALL MAINTAIN A NATURAL GAS CONSUMPTION LOG TO VERIFY COMPLIANCE WITH THE NATURAL GAS USAGE LIMIT. THE LOG SHALL INCLUDE, AT A MINIMUM, THE DATE OF OPERATION OF THIS EQUIPMENT, THE GAS METER READING AT THE BEGINNING OF EACH DAY BEFORE THE EQUIPMENT IS OPERATED, AND AT THE END OF EACH DAY AFTER THE EQUIPMENT IS SHUT DOWN.

6. THIS EQUIPMENT SHALL ONLY BE USED TO PROCESS ARTICLES THAT ARE CLEANED IN THE AIRLESS DEGREASING SYSTEM USING PERCHLOROETHYLENE.

BACKGROUND:

Ducommun Aerostructures, Inc (DAI) is an aerospace contractor whose primary operations involve the manufacture and coating of aerospace components. A/N 485212 and 485213 were received on 7/8/08 for two drying ovens that were not previously permitted. Oven # 1740 is used to dry airplane spoilers and winglets that were cleaned in a closed loop vacuum vapor degreasing system (A/N 430385, P/O F71738). This degreaser uses perc only (exempt solvent) and is an airless type with carbon filter. The perc emissions from the degreaser are <0.5 lb/day, MICR below one in a million and HIA/HIC less than one. Oven# 1726 is exempt under Rule 219 (b)(2). The oven is located near the autoclaves and is strictly for warming up tools. The purpose of warming the tools allows the composite materials to lay-up with ease compared to cold tools. This application will be canceled.

DAI received a four notices to comply to submit certain records or applications. All N/Cs are closed. They also received two notices of violation, both of which are closed. DAI is a Title V facility. A Title V permit renewal was issued to this facility on July 28, 2008. This proposed project is the 1st permit revision to the Title V permit renewal.

EMISSION CALCULATION:

Operating schedule: 24 hrs/day, 7 days/wk, 52 wks/yr (maximum)

The company has agreed to the natural gas usage condition for this oven so BACT is not triggered.

E.F. – 130 lb NOx/million cubic feet of natural gas

ft^3 nat. gas/month = 1 lb NOx/day x (1 MM ft^3 nat gas/130 lb NOx)

= 7,692 ft^3 NG per day

Summary of emissions from the oven combustion of natural gas:

Ovens	*NOx*		*CO*		*PM/PM$_{10}$*	
	lb/hr	*lb/day*	*lb/hr*	*lb/day*	*lb/hr*	*lb/day*
485212	0.04	1	0.01	0.3	0.002	0.06

*See attached spreadsheet for combustion emission calculations.

The perc emissions from the degreaser are <0.5 lb/day. If there is any perc on the parts that is not removed during the degreasing/vapor recovery process (not likely there is any residual perc – see evaluation for the degreaser in file), the emissions are expected to be less than the degreaser emissions.

RULE EVALUATION

RULE 212(c)(1) *This section requires a public notice for all new and modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school.*

Since Immaculate Conception School (K-8) is within 1,000 feet of the facility, a public notice will be required by this section.

RULE 212(c)(2) *This section requires a public notice for all new and modified facilities which have on-site emission increases exceeding any of the daily maximums specified in subdivision (g).*

There will be an increase in emissions from the combustion of natural gas. The following table summarizes the emission limits and increases. Since the increases are below the thresholds, public notice will not be required by this section.

LB/DAY	CO	NOx	PM_{10}	ROG	LEAD	SOx
Max Limit	220	40	30	30	3	60
Increases	0	1	0	0	0	0

RULE 212(c)(3) *This section requires a public notice for all new or modified permit units with increases in emissions of toxic air contaminants listed in Table I of Rule 1401 resulting in MICR greater than $1E^{-6}$ per permit unit or greater than $10E^{-6}$ per facility.*

The emissions calculated from the combustion of natural gas resulted in MICR less than one in a million and HIA/HIC below one. Inclusion of perc emissions, if any, will also result in MICR less than one in a million and HIA/HIC below one. The proposed project is expected to comply with all applicable R1401 requirements. Public notice will not be required per this section.

RULE 212(g) *This section requires a public notice for all new and modified sources that have equipment emission increases exceeding any of the daily maximums as specified by Rule 212 (g).*

As shown in the following table, the emissions increase from this equipment will not exceed the daily maximum limits specified by Rule 212(g). Therefore, public notice will not be required by this section

	ROG	NO_x	PM_{10}	SO_2	CO	Pb
Equipment max emissions	0	1	0	0	0	0
MAX MDC Limit (lb/day)	30	40	30	60	220	3
Required Public Notice	No	No	No	No	No	No

RULE 401 *Visible Emissions*

Visible emissions are not expected with proper maintenance and operation of this equipment. The system shows no visible emissions complaints at this location.

RULE 402 *Nuisance*

Operation of this equipment is not expected to create complaints or nuisance with proper maintenance and operation. The system shows no nuisance complaints at this location.

REG XIII *Rule 1303(a), Best Available Control Technology (BACT)*

NOx emissions will not be over 1 lb/day since they will take a natural gas usage cap of 7,692 cu. ft./day. Perc is not a VOC.

Rule 1303 (b)(1), Modeling

The calculated values for the combustion emissions are less than the screening limits in Table A-1, therefore no further modeling analysis is required

	NOx lb/hr	CO lb/hr	PM_{10} lb/hr
Table A-1 Limit <2 MM Btu/hr	0.2	11.0	1.2
A/N 485212 – Drying Oven	0.04	0.01	0.002

Rule 1304 (c)(1), Offsets Exemption

NOx emissions are 1 lb/day based on the natural gas usage cap of 7,692 cu ft/day for this equipment. The facility emits less than 4 tons of NOx per year (Table A) from permitted and associated equipment, therefore, offsets are not required. The 2007 and 2008 reported AER NOx report shows 1 and 2.7 tons per year (includes unpermitted equipment). Below is the facilty's calculated potential NOx emissions from natural gas burning equipment.

Equipment	*A/N*	*P/O #*	*MM BTU/hr*	*NOx (lb/day)*
Oven, Baking	430371	F71725	1.5	4
Oven (Low Nox)	430410	F77116	2.7	1
Oven (Low Nox)	476446	F97043	2.2	1
Oven (Low Nox)	478401	F97056	2.7	1
Oven, Drying	485212		1.2	1
Total (lb/day)				8
Total (ton/yr)				1.4

RULE 1401 *New Source Review of Toxic air Contaminants*

The MICR calculations of toxic emissions from combustion of natural gas and perc indicate compliance with rule requirements. See attached toxic evaluation.

REGULATION XXX

The proposed project is considered as a "de minimis significant permit revision" to the Title V permit renewal issued 7/28/2008. This is the first revision since the renewal. Rule 3000(b)(6) defines a "de minimis significant permit revision" as any Title V permit revision where the cumulative emission increases on non-RECLAIM pollutants or hazardous air pollutants (HAP) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NOx	40
PM10	30
SOx	60
CO	220

Rule 3003(j) specifies that a proposed permit for the Title V permit renewal shall be submitted to EPA for review. To determine if a project qualifies for a "de minimis significant permit revision", emission increases resulting from all permit revisions that are made after the submittal of proposed permit to EPA shall be accumulated and compared to the above threshold levels. This is the first permit revision to the Title V Permit Renewal. This revision also includes the minor permit revision for change of conditions on four spray booths (A/Ns 485214, 485215, 485218 & 485219) that have been evaluated separately. The cumulative emission increases resulting from this proposed permit revision are summarized as follows:

Revision		HAP	VOC	NOx	PM_{10}	SOx	CO
1st Permit Revision	Change of conditions for four spray booths 485214 & 15, 485218 & 19 (minor)	0	0	0	0	0	0
	Add oven A/N 485212 (deminimis significant)	0	0	1	0	0	0
Cumulative Total		0	0	1	0	0	0
Maximum Daily		30	30	40	30	60	220

RECOMMENDATION:

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a "de minimis significant permit revision", it is exempt from the public participation requirements under Rule 3006 (b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j) in conjunction with the Rule 212 public notice. If EPA does not raise any objections within the review period and upon completion of the Rule 212 public notice period, a revised Title V permit will be issued to this facility.